C2 b ~~21.~~ (Amended) The method of claim ~~16~~ 1, wherein [said] the mammal is a human.

Sub D1 31. (Twice Amended) A method for treating or preventing bronchoconstriction in a human, which method comprises identifying a human in need of such treatment or prevention, and [causing said human to inhale] providing a therapeutically-effective amount of a nitric oxide-releasing compound to a human for inhalation.

C2

Sub D2 38. (Twice Amended) The method of claim 31, wherein said inhalation step is preceded by a step comprising [causing said human to inhale] providing a therapeutically-effective amount of gaseous nitric oxide to the human for inhalation.

C3

Sub D3 44. (Twice Amended) A method of improving gas exchange in the lungs of a mammal, said method comprising identifying a mammal in need of said improved gas exchange, and [causing said mammal to inhale] providing a therapeutically-effective amount of a nitric oxide-releasing compound to a mammal for inhalation.

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Sub D5 47. (Twice Amended) A method of delivering a pharmacoactive compound into the lungs of a mammal, said method comprising [causing said mammal to inhale] providing said compound in the form of a liquid or solid suspended in a gas comprising a therapeutically-effective amount of nitric oxide to a mammal for inhalation.

C5

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Sub D9

83. (Amended) An apparatus for introducing NO gas into the respiratory system of a mammal, comprising

sources of pressurized NO gas, N_2 gas and O_2 gas;

a gas reservoir;

means for controllably releasing said gases into said gas reservoir, thereby forming a gas mixture within said reservoir; and

a tube having a lumen in communication with said reservoir, said tube being equipped with a flowmeter, wherein said tube is configured to route said gas mixture into the respiratory system of a mammal;

provided that the setting on said flowmeter is such that the residence half time of NO in said reservoir during use by [said] such a mammal is 15 seconds or less.

Sub D10

87. (Amended) An apparatus for introducing NO gas into the respiratory system of a patient, comprising:

a source of pressurized NO gas;

an enclosure suitable for providing an ambient atmosphere from which [said] a patient can inhale;

means for charging said atmosphere with NO from said source; and

means for causing said atmosphere to have a high gas turnover rate.

52 ~~94.~~ (Amended) The apparatus of claim ~~92,~~ 51 wherein said [ventialation] ventilation circuit comprises an NO_2 analyzer.

Sub D12

97. (Amended) An apparatus for introducing NO gas into the respiratory system of a mammal, comprising:

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a source of pressurized NO gas;

a source of pressurized O_2-containing gas;

a housing equipped with a flowmeter; and

means for controllably releasing said gases from said sources into said housing to form a gas mixture;

said housing being configured to route said gas mixture into the respiratory system of [said] a mammal.

Sub D13

104. (Amended) A method for treating or preventing reversible pulmonary vasoconstriction in a mammal, which method comprises

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providing for inhalation by a mammal in need of said treatment or prevention a therapeutically-effective amount of an oxygen-containing gas mixture comprising NO at a therapeutically-effective concentration, [and

causing a mammal in need of said treatment to inhale a therapeutically-effective amount of said mixture,] provided that the NO_2 concentration in said gas mixture at the point of inhalation is less than 12 ppm.

105. (Amended) The method of claim 104, wherein said gas mixture contains less than 1 ppm NO_2 when inhaled by [said] the mammal.

~~109.~~ (Amended) The method of claim ~~104~~, wherein [said] such a mammal has or is at risk of developing a clinical condition selected from the group consisting of pneumonia, traumatic injury, aspiration or inhalation injury, fat embolism in the lung, acidosis, inflammation of the lung, adult respiratory distress syndrome, acute mountain sickness, post cardiac surgery acute pulmonary hypertension, persistent pulmonary hypertension of the newborn, perinatal aspiration syndrome, hyaline membrane disease, acute pulmonary thromboembolism, acute pulmonary edema, heparin-protamine reactions, sepsis, hypoxia, asthma, and status asthmaticus.

110. (Amended) A method for treating or preventing reversible pulmonary vasoconstriction in a mammal, which method comprises

providing for inhalation by a mammal in need of said treatment or prevention a therapeutically-effective amount of an oxygen-containing gas mixture comprising NO at a therapeutically-effective concentration; and

monitoring the concentration of NO_2 in said gas mixture prior to said inhalation[; and

causing a mammal in need of said treatment to inhale a therapeutically-effective amount of said gas mixture].

111. (Amended) The method of claim 110, wherein said gas mixture contains less than 1 ppm NO_2 when inhaled by [said] the mammal.

72 ~~114.~~ (Amended) The method of claim ~~110~~ 68, wherein [said] the mammal has or is at risk of developing a clinical condition selected from the group consisting of pneumonia, traumatic injury, aspiration or inhalation injury, fat embolism in the lung, acidosis, inflammation of the lung, adult respiratory distress syndrome, acute mountain sickness, post cardiac surgery acute pulmonary hypertension, persistent pulmonary hypertension of the newborn, perinatal aspiration syndrome, hyaline membrane disease, acute pulmonary thromboembolism, acute pulmonary edema, heparin-protamine reactions, sepsis, hypoxia, asthma, and status asthmaticus.

C12

94 ~~115.~~ (Amended) A method for treating or preventing reversible pulmonary vasoconstriction in a mammal, which method comprises

providing an oxygen-containing gas mixture comprising NO at a therapeutically-effective concentration;

scavenging NO_2 from said gas mixture; and

after said scavenging step, [causing a mammal in need of said treatment to inhale] providing a therapeutically-effective amount of said [resulting] gas mixture for inhalation by a mammal in need of said treatment or prevention.

95 ~~116.~~ (Amended) The method of claim ~~115~~ 94, wherein said gas mixture contains less than 1 ppm NO_2 when inhaled by [said] the mammal.

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~~119.~~ (Amended) The method of claim ~~115~~, wherein [said] the mammal has or is at risk of developing a clinical condition selected from the group consisting of pneumonia, traumatic injury, aspiration or inhalation injury, fat embolism in the lung, acidosis, inflammation of the lung, adult respiratory distress syndrome, acute mountain sickness, post cardiac surgery acute pulmonary hypertension, persistent pulmonary hypertension of the newborn, perinatal aspiration syndrome, hyaline membrane disease, acute pulmonary thromboembolism, acute pulmonary edema, heparin-protamine reactions, sepsis, hypoxia, asthma, and status asthmaticus.

120. (Amended) A method for treating or preventing bronchoconstriction in a mammal, which method comprises

providing for inhalation by a mammal in need of said treatment or prevention a therapeutically effective amount of an oxygen-containing gas mixture comprising NO at a therapeutically-effective concentration, [and

causing a mammal in need of said treatment to inhale a therapeutically-effective amount of said mixture,] provided that the NO_2 concentration in said gas mixture at the point of inhalation is less than 12 ppm.

~~121~~. (Amended) The method of claim ~~120~~, wherein said gas mixture contains less than 1 ppm NO_2 when inhaled by [said] the mammal.

Sub D20

124. (Amended) A method for treating or preventing bronchoconstriction in a mammal, which method comprises

providing <u>for inhalation by a mammal in need of said treatment or prevention a therapeutically-effective amount of</u> an oxygen-containing gas mixture comprising NO at a therapeutically-effective concentration; <u>and</u>

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monitoring the concentration of NO_2 in said gas mixture <u>prior to said inhalation</u>[; and

causing a mammal in need of said treatment to inhale a therapeutically-effective amount of said gas mixture].

125. (Amended) The method of claim 124, wherein said gas mixture contains less than 1 ppm NO_2 when inhaled by [said] <u>the mammal</u>.

89 ~~127.~~ (Amended) A method for treating or preventing bronchoconstriction in a mammal, which method comprises

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providing an oxygen-containing gas mixture comprising NO at a therapeutically-effective concentration;

scavenging NO_2 from said gas mixture; and

after said scavenging step, [causing a mammal in need of said treatment to inhale] <u>providing</u> a therapeutically-effective amount of said [resulting] gas mixture <u>for inhalation by a mammal in need of said treatment or prevention</u>.

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128. (Amended) The ~~method~~ of claim 127, wherein said gas mixture contains less than 1 ppm NO_2 when inhaled by [said] the mammal.

~~130.~~ (Amended) The method of claim ~~104~~, wherein [said] the mammal is a human.

~~131.~~ (Amended) The method of claim ~~110~~, wherein [said] the mammal is a human.

~~132.~~ (Amended) The method of claim ~~115~~, wherein [said] the mammal is a human.

~~133.~~ (Amended) The method of claim ~~120~~, wherein [said] the mammal is a human.

~~134.~~ (Amended) The method of claim ~~124~~, wherein [said] the mammal is a human.

REMARKS

Claims 16-21, 31-36, 38, 44-58 and 69-134 are pending in the application. Several of these claims are amended above in accordance with the Examiner's suggestions, in order to clarify what Applicants consider to be the invention. In addition, typographical errors in claim 94 and the specification have been corrected and the reference to "Fig. 5" in the specification amended to read "Figs. 5a and 5b". No new matter has been added.